Deceptive access promoted by leading neurologists harms patients

To the editor The case described by Musiałek et al[1] in the April issue of *Kardiologia Polska* (*Kardiol Pol*, *Polish Heart Journal*) shows ineffective treatment of a patient with stroke. It illustrates the incorrect, from the public health standpoint, implementation of new technology. Thrombolytic therapy helps to dissolve the clot clogging the vessel and improves blood flow in 25% of the patients with ischemic stroke. However, intracranial bleeding is not a rare complication. Statistical data confirm that early thrombolysis is beneficial for the population, but it is rather a gambling game for an individual patient. Some neurologists, fascinated by the results of clinical trials, promote thrombolysis, while others, mainly caring for patients in practice, are more restrained in offering treatment that relatively often transforms mild ischemic stroke into large hemorrhagic stroke. After many years of promotion, thrombolysis is still far from widespread

use. Recently, a new breakthrough technology has become available—a mechanical retriever of a clot from the occluded vessel (mechanical thrombectomy [MT]). Compared with thrombolysis, it is much more effective and causes fewer complications.[2] However, it has a disadvantage: it cannot be used by neurologists in stroke centers.

Musiałek et al[1] described the case of a patient who was qualified for transfer to a neuroradiological center (comprehensive stroke center [CSC]) after the diagnosis of middle cerebral artery blockage and finding contraindications for thrombolysis. However, the CSC refused to admit the patient arguing that it would be "too late for treatment." Was it necessary to waste time in a local hospital? The scheme of care for the patient with stroke in Poland requires "thrombolysis first" and only if there is no clinical improvement, transfer for endovascular treatment is suggested. This usually causes a much longer delay than in the case of contraindications for lysis. Time-consuming transport and ineffective alteplase usually move patients out of the time window for MT treatment. Every minute counts for saving the brain, so the obvious rule should be "most effective treatment first." There is strong scientific evidence that the benefit of MT is greater than that of fibrinolysis,[3] except when MT is associated with significant waiting time for the procedure. This means that an ambulance should directly go to MT centers from most parts of the country. It is necessary to identify areas away from MT centers, from which transfer to a local stroke unit for thrombolysis could be an appropriate option.[4]

Certain relevant details of the case described by Musiałek et al[1] should be noted. The patient was referred to the CSC on Sunday, late at night. It is reasonable to doubt whether the reason for refusal was the time window for MT treatment or rather lack of readiness for midnight catheterization. The center needs an experienced interventionist ready to work 24/7/365 on-site. It means that 4 to 5 operators should be engaged. To overcome the shortage of interventionists, some centers organize them on-call instead of on-site. Probably, this was the real reason for refusal. Problems with availability of operators on duty easily explain what happened in that case.

The idea to carry out MT exclusively in neuroradiological CSCs has 3 main disadvantages. First, neuroradiological procedures for aneurysms and malformations are not so common and it is not economically reasonable to keep CSCs on 24/7/365 duty. Even the addition of the currently small number of patients requiring MT will not make these centers economically efficient. Second, CSCs have few interventionists, usually 1 or 2—too few to arrange 24-hour on-site service. Third, there is a small number of CSCs, so it is not possible to provide MT in suitable, short time in patients from most areas of the country. This problem could be solved if decision makers were ready to think openly.[5] We have more than 150 cardiac centers performing coronary interventions with teams working on-site 24/7/365. They have a sufficient number of very experienced interventionists. If one-third of them became additionally MT centers, we could cure the current illogical and unethical system, which violates the main Hippocratic principle: "first do no harm."

ARTICLE INFORMATION

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